

What is claimed is:

1. A hybrid stencil printing apparatus comprising:  
a stencil-making/printing unit configured to perforate  
5 a stencil sheet corresponding to a desired image, to wind the  
stencil sheet around outer peripheral surface of a print drum,  
and to transfer a printing medium to the print drum with pressure,  
thereby printing the printing medium;  
an other-method image-formation unit configured to  
10 print the printing medium transferred on the same transfer  
passage as the stencil-making/printing unit according to a  
different printing method from the stencil-making/printing  
unit; and  
an image-formation unit selection-unit configured to  
15 input an original digital image, to determine attributes of  
each image portion of the inputted original digital image,  
and to allocate each image portion selectively to the  
stencil-making/printing unit and the other-method  
image-formation unit based on the determination result.  
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2. The hybrid stencil printing apparatus according to  
claim 1, wherein  
the image-formation unit selection-unit determines  
color attributes of each image portion of the original digital  
25 image, allocates image portions in a color which ink in the  
stencil-making/printing unit is capable of treating to the  
stencil-making/printing unit, and allocates the other image

portions to the other-method image-formation unit.

3. The hybrid stencil printing apparatus according to claim 2, further comprising:

5 a dividing unit configured to divide the original digital image into image portions; and

a determining unit configured to determine color attribute information of the image portions divided into by the dividing unit; wherein

10 the image-formation unit selection-unit allocates the image portions selectively to the stencil-making/printing unit and the other-method image-formation unit based on the color attribute information determined by the determining unit.

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4. The hybrid stencil printing apparatus according to claim 3, wherein

the determining unit determines whether each picture element composing the image portions divided into by the  
20 dividing unit is color picture element or monochrome picture element, determines whether an image portion is in a color region or monochrome region based on the number of color picture elements in the image portion, and outputs the determination result as the color attribute information of the image portion.

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5. The hybrid stencil printing apparatus according to claim 1, wherein

the image-formation unit selection-unit determines whether each image portion of the original digital image is a vector or bit-map image, allocates the vector image portions to the stencil-making/printing unit, and allocates the bit-map image portions to the other-method image-formation unit.

6. The hybrid stencil printing apparatus according to claim 1, further comprising:

a manual image allocating unit configured to allocate the image portions of the original digital image selectively to the stencil-making/printing unit and the other-method image-formation unit manually based on the desires of a user; wherein

the image-formation unit selection-unit determines color attributes of each image portion of the original digital image, determines whether the image portion is a vector or bit-map image, allocates the vector image portions in a color which ink in the stencil-making/printing unit is capable of treating to the stencil-making/printing unit; allocates the bit-map image portions in a color which the ink in the stencil-making/printing unit is incapable of treating to the other-method image-formation unit; allocates the bit-map image portions in the color which the ink in the stencil-making/printing unit is capable of treating to the image-formation unit allocated by the manual image allocating unit; and allocates the vector image portions in the color which the ink in the stencil-making/printing unit is incapable

of treating to the image-formation unit allocated by the manual image allocating unit.

7. The hybrid stencil printing apparatus according to  
5 claim 1, wherein

the other-method image-formation unit is an ink jet image-formation unit configured to print by ejecting ink to the printing medium.

10 8. A method for controlling a hybrid stencil printing apparatus, the hybrid stencil printing apparatus including a stencil-making/printing unit and an other-method image-formation unit, the method comprising:

inputting an original digital image, determining  
15 attributes of each image portion of the inputted original digital image, and allocating each image portion selectively to the stencil-making/printing unit and the other-method image-formation unit based on the determination result;

perforating a stencil sheet corresponding to the image  
20 allocated to the stencil-making/printing unit, winding the stencil sheet around outer peripheral surface of a print drum, and transferring a printing medium to the print drum with pressure and thereby printing the printing medium, in the stencil-making/printing unit; and

25 printing the image allocated to the other-method image-formation unit on the printing medium according to a different printing method from the stencil-making/printing

unit in the other-method image-formation unit.

9. The method according to claim 8, wherein  
in said allocation of the image portion, color attributes  
5 of each image portion of the original digital image are  
determined, the image portions in a color which ink in the  
stencil-making/printing unit is capable of treating are  
allocated to the stencil-making/printing unit, and the other  
image portions are allocated to the other-method  
10 image-formation unit.

10. The method according to claim 8, wherein  
in said allocation of the image portion, whether each  
image portion of the original digital image is vector or bit-map  
15 image is determined, the vector image portions are allocated  
to the stencil-making/printing unit, and the bit-map image  
portions are allocated to the other-method image-formation  
unit.

20 11. The method according to claim 8, further  
comprising:

manually allocating the image portions in the original  
digital image selectively to the stencil-making/printing unit  
and the other-method image-formation unit based on the desires  
25 of a user; wherein  
in said allocation of the image portion, color attributes  
of each image portion of the original digital image are

determined, whether the image is of a vector or of bit-map image is determined, the vector image portions in a color which ink in the stencil-making/printing unit is capable of treating are allocated to the stencil-making/printing unit, the bit-map image portions of a color which the ink in the stencil-making/printing unit is incapable of treating are allocated to the other-method image-formation unit, the bit-map image portions in the color which the ink of the stencil-making/printing unit is capable of treating are allocated to the image-formation unit allocated by the manual image allocation, and the vector image portions in the color which the ink of the stencil-making/printing unit is incapable of treating are allocated to the image-formation unit allocated by the manual image allocation.

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12. The method according to claim 8, wherein the different alternative printing method is ink jet method of printing by ejecting ink to the printing medium.

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13. A computer-readable recording medium, recording a program for controlling a hybrid stencil printing apparatus, the hybrid stencil printing apparatus including a stencil-making/printing unit and an other-method image-formation unit, the program comprising:

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inputting an original digital image, determining attributes of each image portion of the inputted original digital image, and allocating each image portion selectively

to the stencil-making/printing unit and the other-method  
image-formation unit based on the determination result;

perforating a stencil sheet corresponding to the image  
allocated to the stencil-making/printing unit, winding the  
5 stencil sheet around outer peripheral surface of a print drum,  
and transferring a printing medium to the print drum with  
pressure and thereby printing the printing medium, in the  
stencil-making/printing unit; and

printing the image allocated to the other-method  
10 image-formation unit on the printing medium according to a  
different printing method from the stencil-making/printing  
unit in the other-method image-formation unit.

14. The recording medium according to claim 13, the  
15 program wherein

in said allocation of the image portion, color attributes  
of each image portion of the original digital image are  
determined, the image portions in a color which ink in the  
stencil-making/printing unit is capable of treating are  
20 allocated to the stencil-making/printing unit, and the other  
image portions are allocated to the other-method  
image-formation unit.

15. The recording medium according to claim 13, the  
25 program wherein

in said allocation of the image portion, whether each  
image portion of the original digital image is vector or bit-map

image is determined, the vector image portions are allocated to the stencil-making/printing unit, and the bit-map image portions are allocated to the other-method image-formation unit.

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16. The recording medium according to claim 13, the program further comprising:

manually allocating the image portions in the original digital image selectively to the stencil-making/printing unit and the other-method image-formation unit based on the desires of a user; wherein

in said allocation of the image portion, color attributes of each image portion of the original digital image are determined, whether the image portion is of a vector or of bit-map image is determined, the vector image portions in a color which ink in the stencil-making/printing unit is capable of treating are allocated to the stencil-making/printing unit, the bit-map image portions in a color which the ink in the stencil-making/printing unit is incapable of treating are allocated to the other-method image-formation unit, the bit-map image portions in the color which the ink of the stencil-making/printing unit is capable of treating are allocated to the image-formation unit allocated by the manual image allocation, and the vector image portions in the color which the ink of the stencil-making/printing unit is incapable of treating are allocated to the image-formation unit allocated by the manual image allocation.



17. The recording medium according to claim 13, the  
program wherein

the different printing method is ink jet method of  
5 printing by ejecting ink to the printing medium.